

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A semiconductor pressure sensor comprising:
a ~~Silicon~~silicon substrate (1) with a main surface side and a diaphragm (10) which produces a distortion depending on a pressure;
strain gauges (5a, 5b, 5c, 5d) which are provided on the main surface side of the silicon substrate (1) with the diaphragm (10) and ~~is~~are formed by conductive diffusion resistors different from said substrate; and
a getter (8) which is provided on the main surface side of the silicon substrate (1) including a periphery of the getter adjacent to said strain gauges (5a, 5b, 5c, 5d),
said getter comprising the a-PN-junction area to which is provided adjacent to the strain gauges (5a, 5b, 5c, 5d) and which the reverse bias is applied to impressed so that metal impurities may be captured which are contained in the silicon substrate, and which contain at least an Fe atom.
2. (Original) A semiconductor pressure sensor claimed according to Claim 1, wherein
the PN-junction area comprises the boundary surface between the silicon substrate (1) and a diffusion layer (8) provided in the silicon substrate (1).
3. (Original) A semiconductor pressure sensor according to Claim 2, wherein
the diffusion layer (8) is locally provided near the strain gauges (5a, 5b, 5c, 5d).
4. (Original) A semiconductor pressure sensor according to Claim 1, wherein
a plurality of the strain gauges(5a, 5b, 5c, 5d)are provided.
5. (Original) A semiconductor pressure sensor according to Claim 4, wherein
a plurality of the strain gauges(5a, 5b, 5c, 5d) form a Wheatstone Bridge circuit.
6. (Original) A semiconductor pressure sensor according to Claim 5, wherein
the PN-junction area is provided only in the strain gauge (5c) at the side of the large electrical potential difference with a substrate potential among a terminal (4a) at the side of a high electric potential in the Wheatstone Bridge circuit and the terminal at the side of a low potential (4c).

7. (Original) A semiconductor pressure sensor according to Claim 2, wherein the diffusion layer (8) is formed of the combination of the multiple long and slender patterns which is an acute angle toward the strain gauges(5a, 5b, 5c, 5d).